

## CLAIMS

*What is claimed is:*

1. A method of distributing data for use in a catalog, comprising:  
capturing product data for a product according to a data model, the data model having one or more classes, each one of the one or more classes being defined by one or more categories, each of the one or more categories being defined by an attribute group having one or more attributes;  
storing the product data, wherein the stored product data is suitable for use in an electronic catalog; and  
distributing the product data.
2. A method of maintaining catalog data stored in a system product data file, comprising:  
receiving a customer product portfolio file;  
mapping the customer product portfolio file to the system product data file such that each product that is not in the system product data file is identified;  
capturing data for the product that is not in the system product data file; and  
adding the captured data for the product to the system product data file.
3. The method as recited in claim 2, further including:  
generating component data for the product from the system product data file, wherein the component data includes at least one of a product description, technical specifications, a marketing description, an image, and a URL associated with the product.
4. The method as recited in claim 3, wherein technical specifications comprises at least one of main technical specifications and extended technical specifications.
5. The method as recited in claim 3, further including:  
generating enriched product data from the system product data file according to a customer profile; and  
transmitting the enriched product data.

6. The method as recited in claim 5, wherein the steps of generating enriched product data and transmitting the enriched product data are performed simultaneously with the steps of capturing data, adding the captured data, and generating component data.

7. The method as recited in claim 2, wherein the customer product portfolio file includes:

- a manufacturer SKU associated with a product;
- a customer SKU assigned by a customer to the product;
- a manufacturer identifier for the product that identifies a manufacturer of the product; and
- a product description describing the product.

8. The method as recited in claim 3, further including:

- retrieving a component definition associated with the component data, the component definition having a section header, a line header, and a line body definition that defines contents and format for a line body which describes the line header;

- obtaining the contents of the line body from the system product data file and from literals provided in the line body definition; and
- providing the section header, the line header, and the line body.

9. The method as recited in claim 8, further including:

- classifying the product in one of a plurality of categories, each of the categories having at least one attribute group that identifies one or more attributes, each of the attributes being associated with one or more values;

- wherein the line header identifies an attribute group associated with the product.

10. The method as recited in claim 3, further including:

- classifying the product according to a data model;
- extracting information specified by a component definition from the system

product data file and the data model; and

building a component descriptor from the extracted information and the component definition.

5 11. The method as recited in claim 10, further including:

providing the component descriptor in response to a catalog query.

12. The method as recited in claim 10, further including:

storing the component descriptor in a file.

10 13. A method of maintaining catalog data stored in a system product data file, comprising:

receiving a customer product portfolio file that identifies products for which data is requested;

15 mapping the customer product portfolio file to the system product data file such that each product that is not in the system product data file is identified;

generating enriched product data from the system product data file according to a customer profile; and

transmitting the enriched product data.

20 14. The method as recited in claim 13, wherein the customer profile identifies at least one customer, and wherein generating enriched product data from the system product data file according to the customer profile includes:

25 obtaining a system record associated with a customer from the system product data file; and

generating a product header for the system record, the product header including a customer SKU associated with the system record.

30 15. The method as recited in claim 14, wherein the product header further includes a system SKU that identifies a product associated with the system record and a category identifier that identifies a category in which the product is classified.

16. The method as recited in claim 14, wherein the product header further

includes at least one of a manufacturer product description that describes standard features of the product, a product line associated with the product, and a model number associated with the product.

5 17. The method as recited in claim 14, wherein the customer profile further includes customer searchable attribute preferences corresponding to each customer, the customer searchable attribute preferences specifying attributes for which values are to be transmitted, the method further including:

obtaining attribute values for the specified attributes from the system record.

10 18. The method as recited in claim 17, further including:  
producing the customer searchable attribute preferences.

15 19. The method as recited in claim 14, further including:  
producing a list of related products associated with the system record.

20 20. The method as recited in claim 19, wherein the list of related products includes the customer SKU associated with the system record and a customer SKU for each of the related products.

25 21. A method of maintaining catalog data stored in a system product data file, comprising:

receiving a customer product portfolio file that identifies products for which data is requested, the customer product portfolio file including a manufacturer SKU associated with each product, a customer SKU associated with the product, a manufacturer identifier identifying a manufacturer of the product, and a product description describing the product; and

mapping the customer product portfolio file to the system product data file such that each product that is not in the system product data file is identified.

30 22. The method as recited in claim 21, wherein mapping the customer product portfolio file includes:

ascertaining whether the manufacturer identified in the customer product

portfolio file is new, the manufacturer being a new manufacturer if the manufacturer is not identified in the system product data file; and

if the manufacturer is new, assigning a manufacturer identifier to the new manufacturer such that the manufacturer identifier is stored in the system product data file.

23. The method as recited in claim 21, wherein mapping the customer product portfolio file includes:

determining whether the customer SKU in the customer product portfolio file is new, the customer SKU being new if the customer SKU is not identified in the system product data file; and

if the customer SKU is new, creating a new system SKU such that the new system SKU is mapped in the system product data file to the customer SKU.

24. The method as recited in claim 23, further including:

classifying the new system SKU according to a data model, the data model including one or more classes, each of the one or more classes including one or more categories.

25. The method as recited in claim 23, further including:

determining whether the customer SKU is invalid; and  
reporting the customer SKU if it is determined to be invalid.

26. A method of querying a catalog database, the catalog database including product data for one or more products, each of the products being classified in at least one of a plurality of categories, the product data for each product including a set of attributes corresponding to the category within which the product is classified, each of the attributes having at least one attribute value, the method comprising:

accepting a selection of at least one of the set of attributes corresponding to one of the plurality of categories;

accepting a selection of products within the one of the plurality of categories;

obtaining one or more attribute values corresponding to the selected attributes for each of the selected products from the catalog database; and

displaying the obtained attribute values for the selected products..

27. The method as recited in claim 26, where displaying the obtained attribute values for the selected products includes assigning normalized numeric values to the obtained attribute values.

28. A method of querying a catalog database including data for one or more products classified according to a data model, the method comprising:

- accepting a user query specifying a product and a component to be retrieved, the component being at least one of a product description, technical specifications, a marketing description, an image, and a URL associated with the product;
- obtaining a component definition associated with the component;
- extracting information specified by the component definition from the catalog database and the data model; and
- building a component descriptor from the extracted information and the component definition.